

Fig. 1

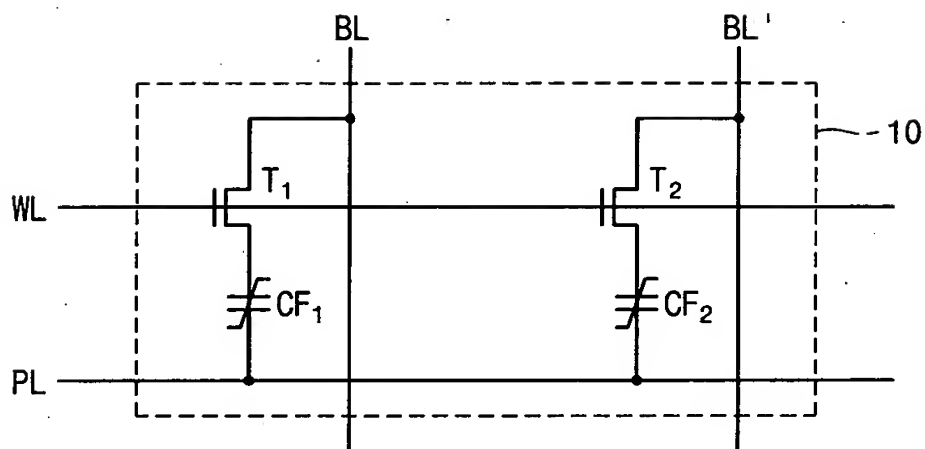
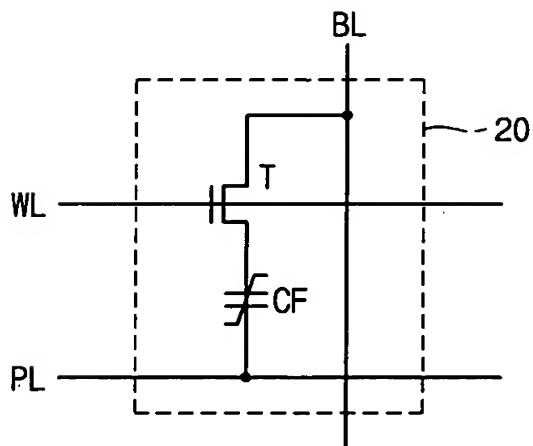


Fig. 2



202210-04545001

Fig. 3

(Prior Art)

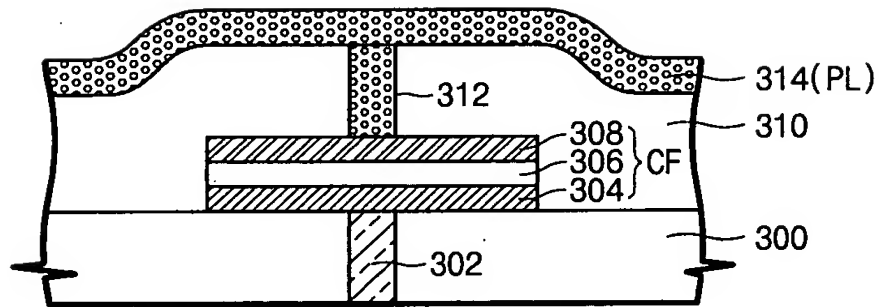
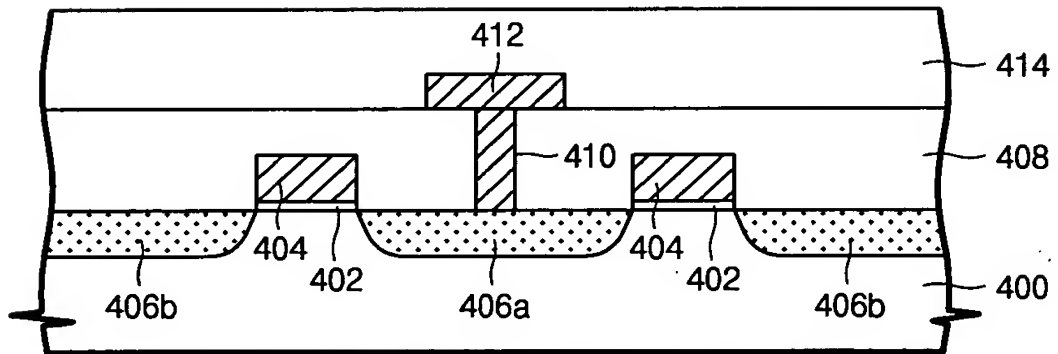


Fig. 4



10054540-012202

Fig. 5

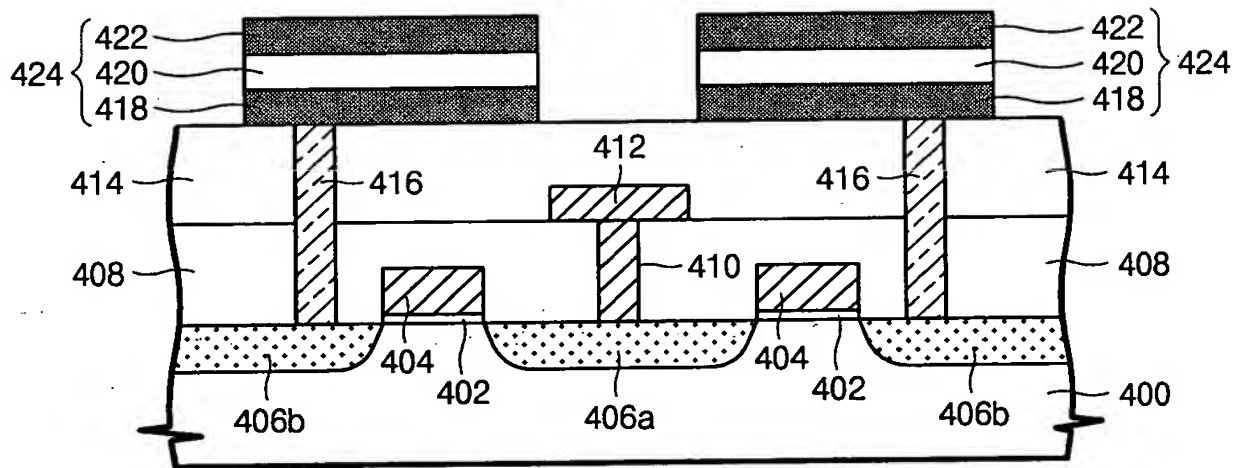
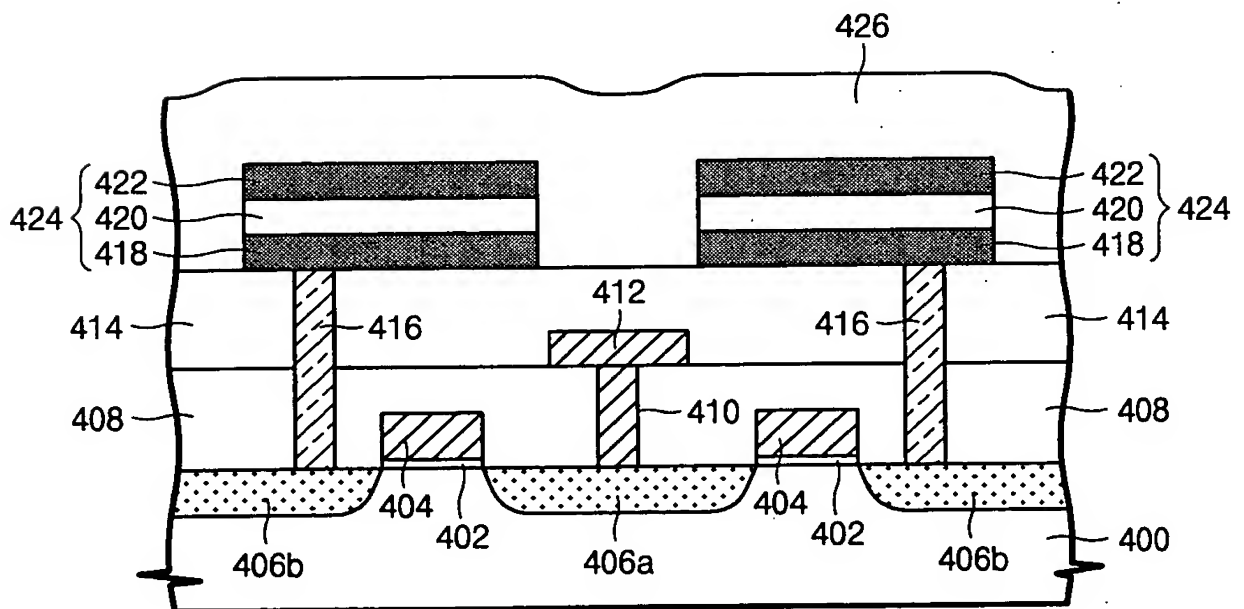


Fig. 6



10044540.012200

Fig. 7

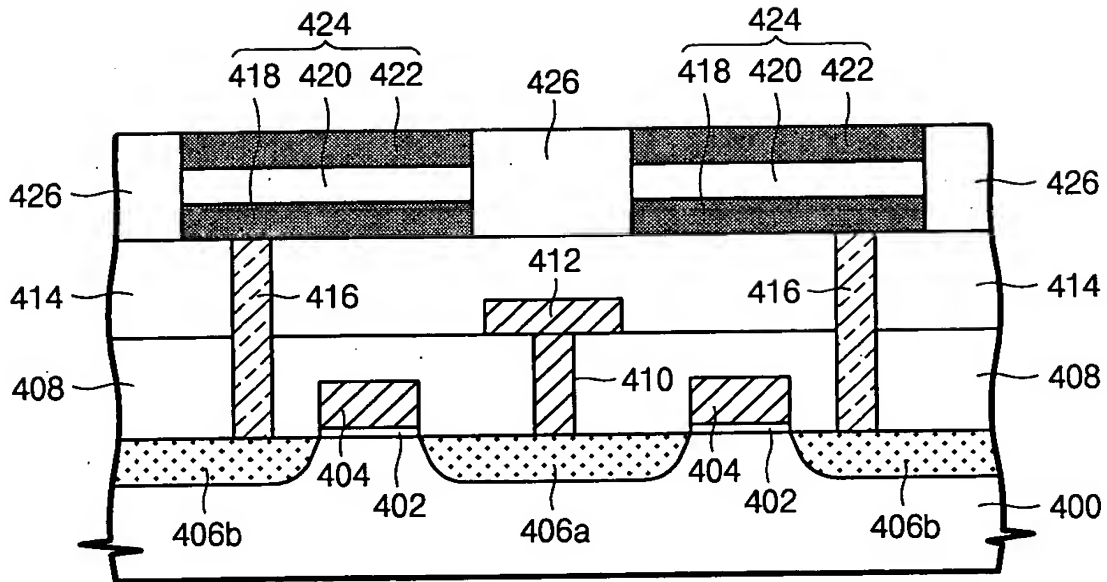
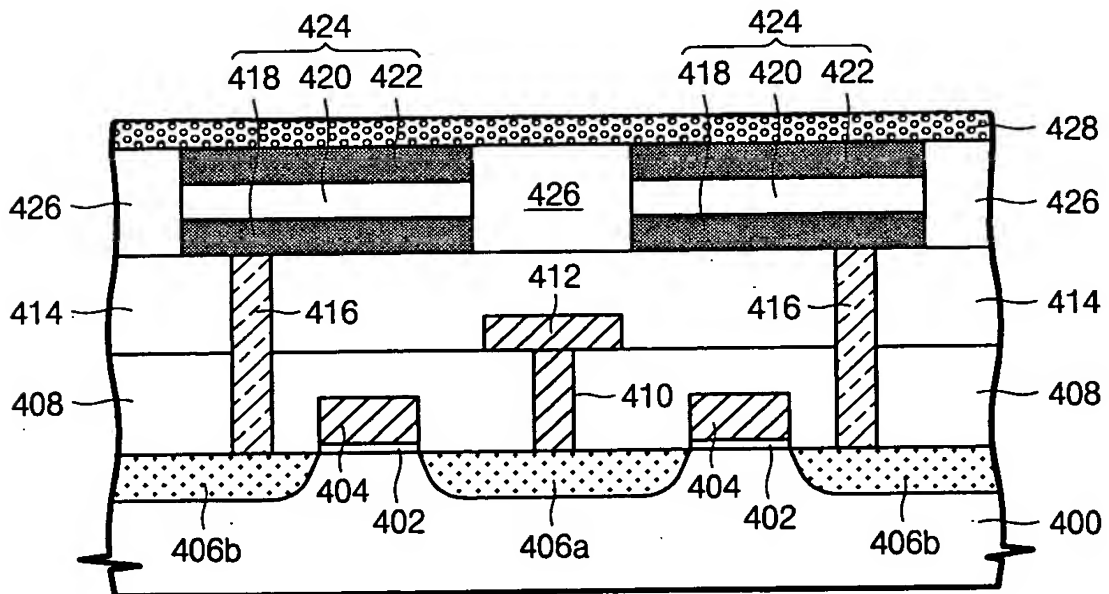


Fig. 8



202210-012202

Fig. 9

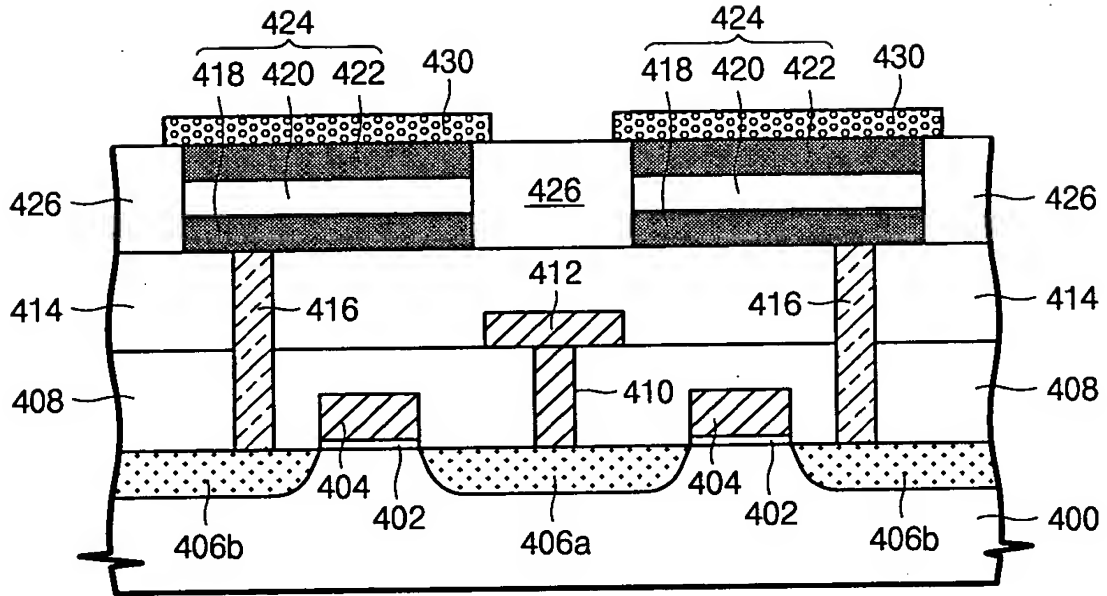
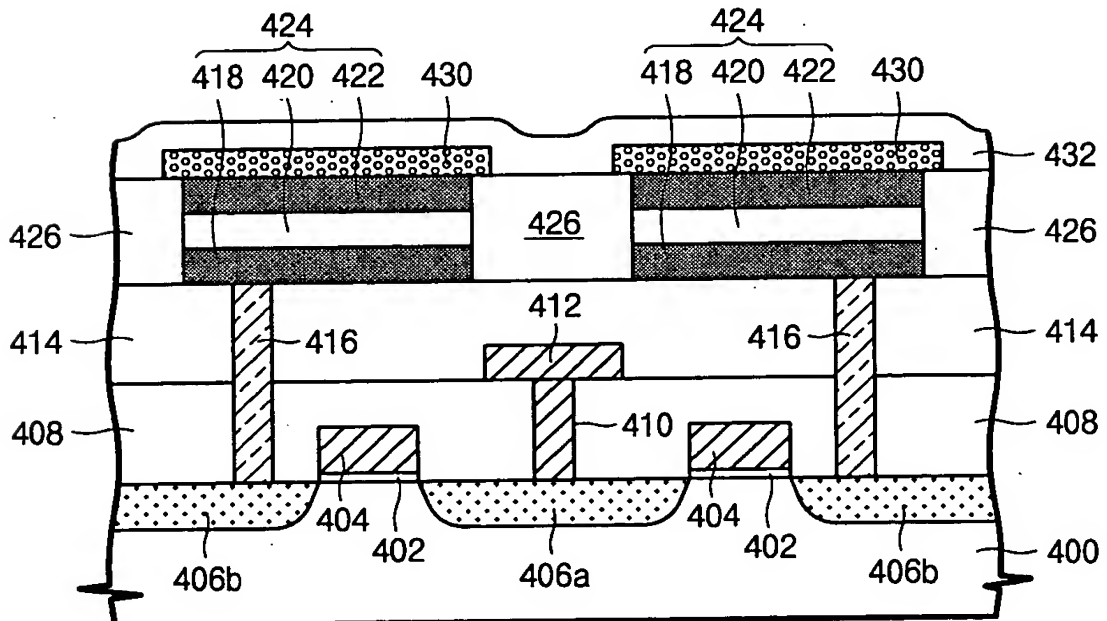


Fig. 10



202210-04545001

Fig. 11

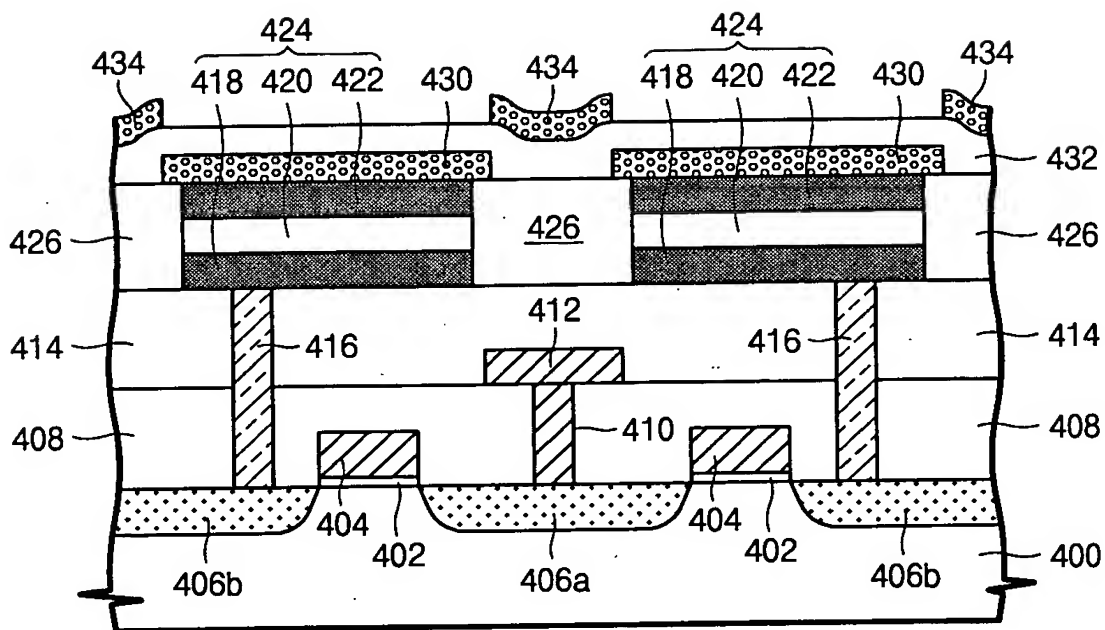
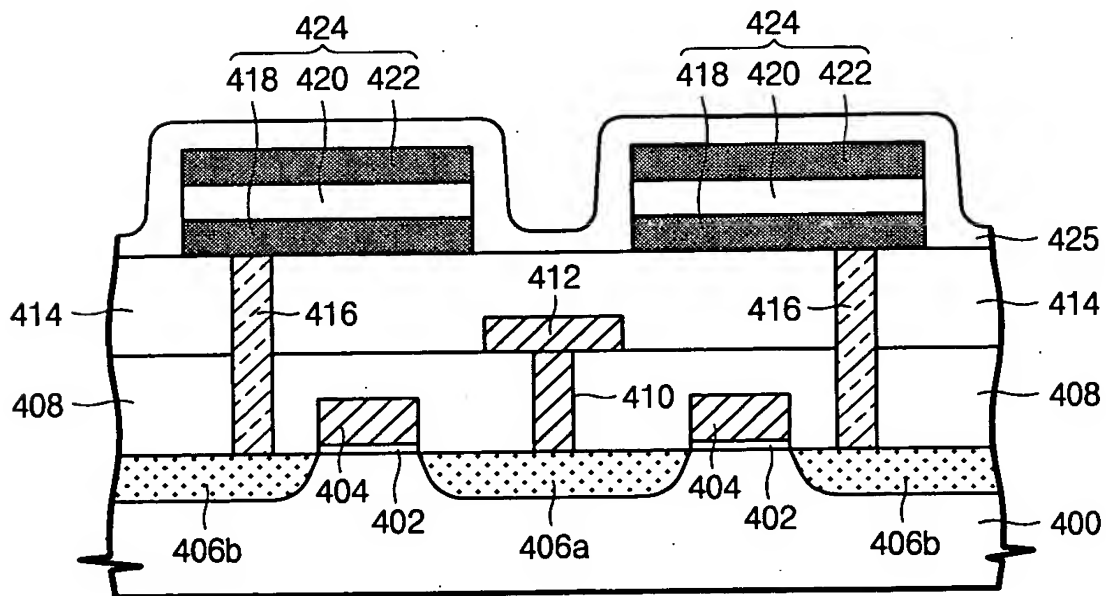


Fig. 12

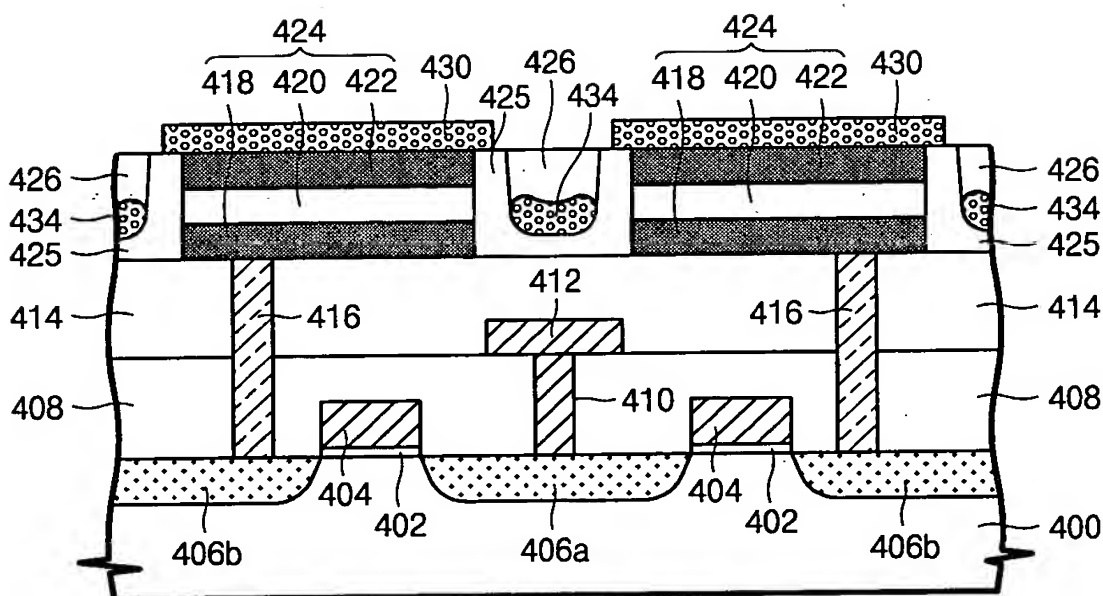


202210-0154540-012202

This cross-sectional view shows a semiconductor device with two active regions. The substrate 400 consists of a base layer 402 and a top layer 404. A central channel region 412 is flanked by two active regions. Each active region contains a stack of layers: a bottom layer 410, a middle layer 416, and a top layer 414. The top layer 414 is patterned into two main sections, each labeled 424, which are further divided into sub-layers 418, 420, and 422. The device is surrounded by a passivation layer 408. The top surface is covered by a protective layer 434, which is patterned to expose the active regions. The bottom surface is also covered by a protective layer 406b, which is patterned to expose the central channel region 412 and the active regions.

This cross-sectional view shows a multi-layered device. At the top, there are three main sections labeled 424, 425, and 424. The first and third sections (424) contain sub-components 418, 420, and 422. The middle section (425) contains sub-components 425, 426, and 434. Below these top layers is a central layer 412, which is flanked by two vertical structures 416. Below layer 412 is another layer 414, which is flanked by two vertical structures 416. Below layer 414 is a layer 408, which is flanked by two vertical structures 416. Below layer 408 is a layer 406a, which is flanked by two vertical structures 416. Below layer 406a is a layer 406b, which is flanked by two vertical structures 416. The bottom-most layer is labeled 400. The device is shown in a cross-sectional view with a break line at the bottom.

Fig. 15



10054540-012202